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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,064	10/07/2002	Ahmet Mursit Eskicioglu	RCA88783	6883
24498 7590 06/19/2007 JOSEPH J. LAKS, VICE PRESIDENT THOMSON LICENSING LLC PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			EXAMINER PATEL, NIRAV B	
			ART UNIT 2135	PAPER NUMBER
			MAIL DATE 06/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/581,064

Applicant(s)

ESKICIOGLU ET AL.

Examiner

Nirav Patel

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application.
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on September 11, 2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejections is set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

2. Claims 1-4 are pending.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (US Patent No. 5,351,294) and in view of Takaragi et al (US Patent No. 5,103,479).

As per claim 1, Matsumoto teaches:

receiving said signal in a smart card, said signal being scrambled using a scrambling key [Fig. 1, 4, 5, col. 6 lines 58-68]; receiving, in said smart card, data representative of a first seed value [Fig. 4, 5, col. 7 lines 20-45]; (c) generating, in said smart card, said scrambling key using said first seed value and a second seed value in a predetermined function, whereby secret sharing is implemented, said second seed value being permanently stored in said smart card [Fig. 4, 5, 7A, 7B, col. 7 lines 24-49, col. 4 lines 40-45].

Matsumoto teaches descrambling said signal using said generated scrambling key to provide a descrambled signal [col. 7 lines 5-7, Fig. 4].

Matsumoto teaches a receiving station/user terminal, which further comprises the IC card and performs the descrambling process [Fig. 4, 5]. The IC card includes a CPU and a memory as shown in Fig. 7A. Matsumoto doesn't expressively mention descrambling in said smart card.

However, Takaragi teaches ciphering/deciphering equipment includes a CPU and a memory and performs the ciphering/deciphering operation [Fig. 1, col. 5 lines 36-52]. Further, Takaragi teaches the IC card includes a microcontroller and a memory, which

performs the same function as the CPU (i.e. ciphering/deciphering operation) [col. 10 lines 25-29, Fig. 10 i.e. descrambling in said smart card].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Takaragi and Matsumoto, since one would have been motivated to provide the enciphering/deciphering function at a high seed [Takaragi, col. 3 lines 25-33] and reduce a load/burden on the whole system/broadcast function [Matsumoto, col. 4 lines 5-6].

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (US Patent No. 5,351,294) and in view of Takaragi et al (US Patent No. 5,103,479) and in view of Schwenk et al (US Patent No. 6,760,445).

As per claim 2, the rejection of claim 1 is incorporated and Matsumoto teaches the first and second seed values [col. 7 lines 21-48].

Schwenk teaches points on a Euclidean plane [Fig. 1, 4 col. 3 lines 19-30].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Takaragi and Matsumoto, since one would have been motivated to calculate a key and enhance the security in the distributed data network [Schwenk, col. 5 lines 43-50].

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As per claim 3, the rejection of claim 2 is incorporated and Schwenk teaches:

generating said scrambling key comprises calculating the Y-intercept of a line formed on said Euclidean plane by said first and second seed values [Fig. 3, col. 4 lines 1-40].

As per claim 4, the rejection of claim 3 is incorporated and Matsumoto teaches:

said smart card has a card body having a plurality of terminals arranged on a surface of said card body in accordance with one of ISO 7816 and PCMICA card standards [Fig. 7A, col. 7 lines 14-20].

### **Response to Argument**

5. Applicant's arguments filed September 11, 2006 have been fully considered. In view of applicant's argument that the combination of Chaney and Shamir does not teach or suggest generating a scrambling key in a smart card using a first seed value received by the smart card and a second seed value permanently stored in the smart card", is found persuasive. Newly found references by Matsumoto et al, Takaragi et al and Schwenk et al are used as above. Matsumoto teaches the claim limitation "generating, in said smart card, said scrambling key (common key - K) using a first seed value received by the smart card (B-Block – destination information) and a second seed value permanently stored in the smart card (initial value/parameter k)" [col. 7 lines 10-49, Fig. 4, 5, 7A]. See detail action above.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kamitaka (US 4751732) – Broadcasting system

Takaragi et al (US 5117458) --- Secret information service system and method.

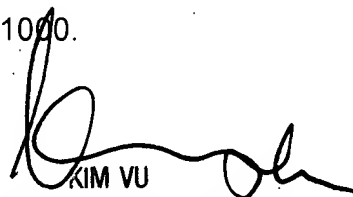
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. The examiner can normally be reached on 8 am - 4:30 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NBP

6/6/07

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
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